

NOTES & NEWS

New Record of *Conus ebraeus*
in Costa Rica

BY

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Conus ebraeus LINNAEUS, 1758, an Indo-Pacific cone, is known to range in the eastern Pacific to Clipperton Island and also to the Galapagos Islands. KEEN (1958) and HANNA (1963) both stated that Mr. Ted Dranga found it living in Costa Rica. There seem to be no other published records of *C. ebraeus* from the Central American coast. On March 18, 1965 I collected two living specimens of *C. ebraeus* LINNAEUS under rocks in the intertidal zone one mile south of Playas del Coco, Guanacaste Province, Costa Rica. These specimens have been deposited in the Museum of Comparative Zoology, Harvard University.

LITERATURE CITED

- KEEN, A. MYRA
1958. Sea shells of tropical West America; marine mollusks from Lower California to Colombia. i-xi + 624 pp.; illus. Stanford, Calif. (Stanford Univ. Press)
- HANNA, G DALLAS
1963. West American mollusks of the genus *Conus*; II. Calif. Acad. Sci. Occ. Papers 35:1 - 103; pls 1 - 11 (28 Jan. 1963)

Spawning Notes, I.
Hexaplex erythrostomus

BY

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(1 Text figure)

Hexaplex erythrostomus (SWAINSON, 1831) was encountered only once during intensive collecting (11 and 5 days, respectively) in June and July 1967 in Bahía de los Angeles, Baja California: on July 20, I came upon a

group of seven individuals in the process of depositing egg masses on rock substrates. Local residents inform me that this was the beginning of an annual spawning migration from the depths by this species. Two egg masses, each within a single mussel valve, were also found on the reef.

In September, specimens ranging from 1" to 4" were present throughout the bay, 4 egg masses, all deposited in mussel valves were found, and an individual was observed spawning on a small rock while two others were copulating beside it.

One irregularly shaped egg mass measured 100 mm by 70 mm by 40 mm (greatest dimensions) and consisted of approximately 400 curved, tongue-shaped capsules, the base of each attached in an irregular manner to one or two underlying capsules. A few short stalks cement the mass to the substrate. Individual capsules are roughly of the same size (see Figure 1), averaging 6 mm in length

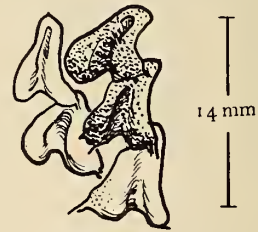


Figure 1

and 1 mm in breadth; average width is 6 mm at the base of the "tongue," 3 mm at the tip. The upper surface bears a groove with rounded edges, the lower is smooth and convex. The base color is creamy white, when fresh, but some capsules (generally those at the base of the mass) are tinged with varying amounts of pink, ranging from the shade characteristic of the species to magenta. The eggs exhibit the same range of pigmentation, which may be indicative of the degree of development. There are over 100 eggs per capsule.

The mass apparently serves as a symbiotic habitat: a 1 cm amphipod, an 8 mm *Hormomya* and several copepods were lodged between the capsules of the masses collected.

A. M. U.

The thirty-third annual meeting of the American Malacological Union was held at Ottawa, Ontario, Canada July 31st to August 5th, 1967. It was the best attended meeting in AMU history as 163 persons listened to a record